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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/258,013 02/25/99 SRIVASTAVA

A 50277-236

EXAMINER

TM02/0911

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PRIETO, B

ART UNIT

PAPER NUMBER

2152

DATE MAILED:

09/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/258,013	Applicant(s) SRIVASTAVA ET AL.	
	Examiner B. PRIETO	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/08/01.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

Detailed Action

1. Drawings have been objected to by the Draftsperson under 37 CFR 1.84 or 1.152, correction noted on PTO-948 is required.
2. The following is a quotation of 35 U.S.C. §103(a), which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herriot U.S. Patent No. 5,862,331 in view of Iba et. al. (Iba) U.S. Patent No. 5,835,766.

Regarding claims 1-2, Herriot teaches a method comprising the steps of; registering (register means col 3/lines 34-39, 46-56, col 5/lines 32-39) in a name (host 1-3) service (programs running of a server host having network related information, col 1/lines 36-48) participant data that identifies (identification information col 4/line 53-64, col 2/lines 52-61, e.g. name and/or address) a plurality of participants that are taking and/or forming part i.e. participating in said distributed operation (distributing computing environment, col 1/lines 49-56); and causing a node (requesting application program, col 3/lines 46-56, e.g. 204, nodes 101-103 acting as clients) that requires information about participants (required information col 4/lines 34-39, col 65-col 5, line 1, information needed to communicated, col 1/lines 12-19) in said distributed operation to retrieve said participant data (col 4/lines 34-col 5/line 6, data, col 3/lines 36-39) from said name service (requested/returned information, col 5/lines 43-51); however Herriot does not explicitly teach wherein the step of causing a node to retrieve said participant data includes causing said node to retrieve

said participant data in response to said node particularly performing deadlock detection means;

Iba teaches means for causing a application node to retrieve information from a database participating in a distributed operation which includes causing said node to retrieve said participant data in response to said node performing an exclusive control means (col 4/lines 12-22, requesting application performing required lock acquisition means, database server participating in distributed transaction operations), disclosing means for enabling a application node to retrieve data from a database application of a plurality of database servers, said database applications providing information upon request, i.e. a database server which are participating in a distribution transaction (system means, col 1/lines 12-18, 58-42, abstract); It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify existing system with means for causing any requesting program to retrieve data from a database server by particularly enabling deadlock generation and detection means so as to enable (stretch over) access to a plurality of resources operable to both distributed local transaction and distributed global transactions, as taught by Iba.

Regarding claim 3, the combined teachings as discussed above further teach wherein said distributed operation is a distributed transaction (Herriot, col 1/lines 49-56, and Iba, abstract, col 7/lines 32-40); and the step of registering includes registering in a name service participant data that identifies which database servers of a plurality of database servers are participating in said distributed transaction (Herriot, col 1/lines 49-56 server in a distributed computing environment having register means col 3/lines 34-39, 46-56, col 5/lines 32-39, registering in a name service, databases servers participating in said distributed transaction operation, Iba, col 7/lines 32-40, col 9/lines 9-14, abstract);

Regarding claim 4, the combined teachings as discussed above further teach further including the step of causing updates to said participant data to identify a new participant in said distributed operation (Herriot, col 2/lines 50-61, updating means col 6/lines 46-50 comprising identification of new/added participant).

Regarding claim 5, the combined teachings as discussed above further teach wherein said distributed operation is a distributed database transaction being executed by a set of transaction processes (Iba, col 1/lines 20-24) coordinated by transaction management means (a coordinator process) (Iba, col 1/lines 58-42, distributed transaction processing means, col 7/lines 32-460; the method further includes the step of said coordinator process causing a new process associated with name service participant data (Herriot, updates identify new host of services (application/process) added, col 6/lines 46-50, which identifies which database server of said plurality of database server participate in said distributed database transaction, wherein updates means causing to said participant response to said new process participating in said distributed database transaction; (Herriot, registering new (added) services/host, col 2/lines 56-61, Iba, distributed database transactions, col 7/lines 32-40, col 9/lines 9-14).

Regarding claim 6, comprises the combined limitation discussed on claims 1-3 and 5, same rationale is applicable;

Regarding claim 7 the combined teachings and limitations as discussed in claims 1-5 above further teach the step of assigning a transaction identifier to said distributed database transaction (Herriot, identify means, col 2/lines, 52-61, name service comprising identifying means, col 4/lines 34-56, of participants in distributed operations being distributed transactions, name service having said participant data comprising identifying data of database servers participating in said distributed transactions, as discussed above); and the step of causing a node (requesting application program, col 3/lines 46-56, e.g. 204, nodes 101-103 acting as clients) that requires information about participants (required information col 4/lines 34-39, col 65-col 5, line 1, information needed to communicated, col 1/lines 12-19) in said distributed operation to retrieve said participant data (col 4/lines 34-col 5/line 6, data, col 3/lines 36-39) from said name service (requested/returned information, col 5/lines 43-51), requested information from said name service distributed,

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disseminated, i.e. published data associated with said transaction identifier (identifier of a database participating in a distributed transaction (transaction identifier), discussed above.

Regarding claims 8-10, the combined teachings as discussed above further teach wherein name service process receiving a request from a first requesting process to supply said participant data from one structure residing on multiple or instances of a server, wherein said name service process and said first requesting process reside on said node (Herriot, col 3/lines 46-64 client requesting programs running on name service host) of from one data structure, col 6/lines 46-54).

Regarding claims 11-20, these claim comprise the computer-readable medium carrying one or more sequences of one or more instructions, wherein the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of the method disclosed on claims 1-10, same rationale is applicable.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Prieto, B.** whose telephone number is **(703) 305-0750**. The Examiner can normally be reached on Monday-Friday from 6:30 to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Mark H. Rinehart** can be reached on **(703) 305-4815**. The fax phone number for the organization where this application or proceeding is assigned is **(703) 308-6606**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is **(703) 305-3800/4700**.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-7240 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".


B. Prieto

Patent Examiner

September 9, 2001


MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100